

WHAT IS CLAIMED IS:

1. A method comprising:
 - picking up a clip with a chuck; and
 - while holding the clip with the chuck, picking up an integrated circuit (IC) die
- 5 with the IC die in contact with the clip.
2. The method of claim 1, wherein the picking up of the IC die includes applying a vacuum to the IC die.
3. The method of claim 2, wherein the vacuum is applied to the IC die via an aperture in the clip.
- 10 4. The method of claim 3, wherein the IC die is in contact with a polymer pad that is part of the clip.
5. The method of claim 1, further comprising:
 - using the chuck to simultaneously place the clip and the IC die into juxtaposition with a heat spreader.
- 15 6. The method of claim 5, further comprising:
 - releasing the clip and the IC die from the chuck while holding the IC die in place on the heat spreader with the clip.
7. The method of claim 6, further comprising:

bonding the IC die to the heat spreader while holding the IC die in place on the heat spreader with the clip.

8. The method of claim 7, further comprising:

after bonding the IC die to the heat spreader, removing the clip from the IC die
5 and from the heat spreader.

9. The method of claim 7, further comprising:

before bonding the IC die to the heat spreader, transporting the heat spreader with the IC die held in place on the heat spreader by the clip.

10. The method of claim 9, wherein the transporting of the heat spreader with the IC die
10 held thereon by the clip is performed after the releasing of the clip and the IC die from the chuck.

11. The method of claim 7, wherein the bonding includes reflowing a solder layer on the heat spreader.

12. The method of claim 1, further comprising:

15 using the chuck to simultaneously place the clip and the IC die into juxtaposition with a package substrate.

13. A method comprising:

holding a clip in a chuck such that an aperture in the clip is aligned with an aperture in the chuck; and

picking up an integrated circuit (IC) die by applying a vacuum to the IC die via the apertures in the clip and in the chuck.

14. The method of claim 13, further comprising:

5 using the chuck to simultaneously place the clip and the IC die into juxtaposition with a heat spreader.

15. The method of claim 14, further comprising:

releasing the clip and the IC die from the chuck while holding the IC die in place on the heat spreader with the clip.

16. The method of claim 15, further comprising:

10 bonding the IC die to the heat spreader while holding the IC die in place on the heat spreader with the clip.

17. The method of claim 16, further comprising:

after bonding the IC die to the heat spreader, removing the clip from the IC die and from the heat spreader.

15 18. The method of claim 13, wherein the IC die is held by the chuck with the clip interposed between the IC die and the chuck.

19. The method of claim 13, further comprising:

using the chuck to simultaneously place the clip and the IC die into juxtaposition with a package substrate.

20. A clip, comprising:

a main body;

5 a plurality of legs extending downwardly from the main body; and

a polymer pad mounted on an underside of the main body.

21. The clip of claim 20, wherein a first aperture is formed in the main body, and a second aperture is formed in the polymer pad, the first and second apertures being aligned with each other.

10 22. The clip of claim 20, wherein the polymer pad is formed of one of: silicone, a fluoropolymer sponge, and polyimide.